

rating scale, ejection fraction, restenosis rates, the differences were statistically significant ( $P<0.05$ ).

**Conclusions:** The whole range of care and love model for CPC patients with STEMI has played an important role in the treatment and rehabilitation etc. And it should be promoted. By the way, more attention should be paid on shortening D2B time, the reperfusion time, the community first aid, the rapid transportation and other pre-hospital training.

GW25-e5198

#### The Study on Burden and Influence Facts in Heart Failure Family Caregivers

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**Objectives:** Discuss family caregiver's burden and influence facts of heart failure patients. To present corresponding measures and solution in order to reduce patients caregiver's burden and enhance congestive heart failure patients' living quality.

**Methods:** The research objects are 120 patients with heart failure in hospital who had met the standard of first hospital Geriatrics of Jilin University during May 2013 to December 2013. Adopts the method of questionnaire survey, to understand the basic condition of the heart failure patients and their family caregivers through general information, to assess the Burden of family Caregivers of patients with heart failure Through the caregiver Burden questionnaire (Caregivers Burden Inventory CBI). By using SPSS13.0 software package, to make the descriptive statistical analysis of the questionnaire result, correlation analysis, etc.

**Results:** (1) Score distribution of the burden of Heart failure patients' family caregivers scope in 1-69, an average of score were 26.53 and 16.70, five dimensions of the highest burden scores were time dependency burden and limited development burden, followed by the physical burden, the lowest were social burden and affective burden. (2) Caregivers of patients gender, age, patients age, illness age, culture and medical payment way had an impact on the burden of caregivers.

**Conclusions:** By improving the knowledge of the caregivers of heart failure, medical personnel should establish corresponding propaganda, education and follow-up visit system, reduce the burden of caregivers.

GW25-e3546

#### Analysis for the security management of radial artery after PCI

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**Objectives:** To explore the effects of monitoring postoperative transcutaneous oxygen saturation in preventing radial artery occlusion after PCI treatment.

**Methods:** 285 patients who underwent PCI via radial artery from January to March in 2014 were randomly divided into clinical groups ( $n=143$ ) and the control group ( $n=142$ ). Make sure the Allen test of the operation side was negative preoperatively, and no special discomfort was observed after surgery. Press the ulnar artery for 30 seconds, and simultaneously measure the blood oxygen saturation of the operation side. Clinical group: radial artery hemostat decompression was given after observation of  $spO_2$  was less than 95%, until the blood oxygen saturation rose to more than 95%, and ensure that no bleeding was seen at the puncture point. Control group: No intervention, only monitoring  $spO_2$  of the operation side. Both groups underwent intermittent release of the pressure according to the tourniquet instruction. Radial artery occlusion was observed after 24 hours in both groups with ultrasonography.

**Results:** Through adjusting the compression pressure of the hemostat according to  $spO_2$  of the operation side, the incidence of radial artery occlusion was significantly reduced ( $\chi^2=5.348$ ,  $P=5.348$ ).

**Conclusions:** Through adjusting the compression pressure of the hemostat according to  $spO_2$  of the operation side, the incidence of radial artery occlusion was significantly reduced in patients underwent PCI, thereby reducing the pain of the patients, improving the quality of life after surgery. All in all, this method is worth to be widely used in the clinical nursing work.

GW25-e4570

#### Effect of Continuous Nursing Intervention on Quality of Life in Elderly Patients with Chronic Diseases

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**Objectives:** To investigate the effect of continuous nursing intervention on quality of life in elderly patients with chronic diseases.

**Methods:** 110 cases of senile heart failure patients were randomly divided into intervention group and control group, the control group health education during hospitalization for conventional systems and discharge guidance; the control group on the basis of the discharged patients continuity nursing intervention for 6 months. By continuity nursing intervention by responsibility nurse by telephone, booking service, network communication etc.

**Results:** The elderly patients with chronic disease hospital readmission rate continuity nursing intervention after falling, life quality and compliance was significantly higher than that in the control group, but no significant difference between two groups mortality rate.

**Conclusions:** Continuity nursing intervention is helpful to improve the quality of life of patients and compliance, reduce relapse rate.

## Psychology

GW25-e4488

#### The value of Chinese version GAD-7 and PHQ-9 to screen anxiety and depression in cardiovascular outpatients

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**Objectives:** The Chinese version of generalized anxiety scale (GAD-7) and patient health questionnaire depression scale (PHQ-9) has been widely used in primary care setting. This paper aims to evaluate the reliability and validity of Chinese version GAD-7 and PHQ-9 as a screening instrument for anxiety and depression among cardiovascular outpatients.

**Methods:** A total of 201 consecutive participants from psycho-cardiological outpatients completed the GAD-7 and PHQ-9. All patients were interviewed on the basis of the Mini International Neuropsychiatric Interview (MINI). After cardiology diagnosis, all participants completed the mental psychological assessment by psychiatrist according to the Composite International Diagnostic Interviews (CIDI). 50 cases were retested to assess the retest reliability after 1 week. The GAD-7 and PHQ-9 were validated against the CIDI reference criterion.

**Results:** According to the CIDI standard, 74 outpatients were diagnosed with anxiety and 43 outpatients had major depression disorder. The Cronbach's alpha coefficients of the GAD-7 and PHQ-9 scales were 0.866 and 0.809, respectively. The test-retest reliability (intraclass correlation coefficient) of GAD-7 and PHQ-9 were 0.823 and 0.882. Taking CIDI as the gold criterion, the optimum cutoff value of the GAD-7 was 10 with a sensitivity of 86.4%, specificity of 85.8%, positive predictive value (PPV) of 88.8 % and negative predictive value (NPV) of 91.5 %, with the areas under ROC curves (AUC) was statistically significant ( $AUC=0.927$ ,  $SE=0.021$ , 95% CI 0.886-0.968)). For PHQ-9 scale, a cutoff value of 10 presented good values of sensitivity of 87.1%, specificity of 83.5%, PPV of 58.7% and NPV of 95.6 %, with the areas under the ROC curves (AUC) was statistically significant ( $AUC=0.876$ ,  $SE=0.032$ , 95% CI 0.813-0.938). GAD-7 and PHQ-9 were strongly correlated with anxiety part and depression part of MINI scale, and the correlation coefficient was 0.765 and 0.792 respectively.

**Conclusions:** The Chinese version of GAD-7 and PHQ-9 were reliable and efficient instrument to screen anxiety and depression in Chinese cardiovascular outpatients.

GW25-e5121

#### Role of DNA Methylation in NET Gene Promoter Region on the Association between Depression and Hypertension

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**Objectives:** Depression has been demonstrated to be associated with hypertension. Increased sympathetic nervous system activities, usually measured as norepinephrine (NE) levels, and decreased NE transporter (NET) function, are thought to be plausible for the depression-hypertension association, through epigenetic modification. The present study aims to detect the role of DNA methylation in NET gene promoter region on the association between depression and hypertension.

**Methods:** One hundred and sixty-two subjects, with no history of diabetes, stroke and coronary heart disease and matched for smoking, drinking and physical activity, were categorized into four groups (depression-hypertension, nondepression-hypertension, depression-nonhypertension and nondepression-nonhypertension) according to their depression scores and blood pressure levels. DNA was extracted from peripheral white blood cell and methylation levels of 9 CpG sites in NET gene promoter region were investigated using pyrosequencing. Methylation differences between groups were analyzed using Analysis of Variance. Multiple regression models were fitted to adjust for the potential confounding effect. The Spearman's correlation coefficients, principle component analysis (PCA) and hierarchical clustering analysis (HCA) were used to explore the relationship among CpG sites.